the hatch shall be adequately secured to prevent cargo from falling into the hold.

## § 1918.42 Hatch beam and pontoon bridles.

- (a) Hatch beam and pontoon bridles shall be:
- (1) Long enough to reach the holes, rings, or other lifting attachments on the hatch beams and pontoons easily;
- (2) Of adequate strength to lift the load safely; and
- (3) Properly maintained, including covering or blunting of protruding ends in wire rope splices.
- (b) Bridles for lifting hatch beams shall be equipped with toggles, shackles, or hooks, or other devices of such design that they cannot become accidentally dislodged from the hatch beams with which they are used. Hooks other than those described in this section may be used only when they are hooked into the standing part of the bridle. Toggles, when used, shall be at least one inch (2.5 cm) longer than twice the largest diameter of the holes into which they are placed.
- (c) Bridles used for lifting pontoons and plugs shall have the number of legs required by the design of the pontoon or plug, and all of which shall be used. Where any use of a bridle requires fewer than the number of legs provided, idle legs shall be hung on the hook or ring, or otherwise prevented from swinging free.
- (d) At least two legs of all strongback and pontoon bridles shall be equipped with a lanyard at least eight feet (2.4 m) long and in good condition. The bridle end of the lanyard shall be of chain or wire.

# §1918.43 Handling hatch beams and covers.

Paragraphs (f)(2), (g), and (h) of this section apply only to folding, sliding, or hinged metal hatch covers or to those hatch covers handled by cranes.

(a) (1) When hatch covers or pontoons are stowed on the weather deck abreast of hatches, they shall be arranged in stable piles not closer to the hatch coaming than three feet (.91 m). Exception: On the working side of the hatch, hatch covers or pontoons may be spread one high between the coaming

- and bulwark with no space between them, provided the height of the hatch coaming is no less than 24 inches (.61 m). Under no circumstances shall hatch covers or pontoons be stacked higher than the hatch coaming or bulwark on the working side of the hatch.
- (2) On seagoing vessels, hatch boards or similar covers removed from the hatch beams in a section of partially opened hatch during cargo handling, cleaning or other operations shall not be stowed on the boards or covers left in place within that section.
- (b) Hatch beams shall be laid on their sides, or stood on an edge close together and lashed. Exception: This paragraph (b) shall not apply in cases where hatch beams are of such design that:
- (1) The width of the flange is 50 percent or more of the height of the web; and
- (2) The flange rests flat on the deck when the hatch beam is stood upright.
- (c) Strongbacks, hatch covers, and pontoons removed from hatch openings and placed on the weather deck shall not obstruct clear fore-and-aft or coaming-to-bulwark passageways and shall be lashed or otherwise secured to prevent accidental dislodgement. Dunnage or other suitable material shall be used under and between tiers of strongbacks and pontoons to prevent them from sliding when stowed on steel decks.
- (d) Hatch covers unshipped in an intermediate deck shall be placed at least three feet (.91 m) from the coaming or they shall be removed to another deck. Strongbacks unshipped in an intermediate deck shall not be placed closer than six inches (15.2 cm) from the coaming and, if placed closer than three feet (.91 m), shall be secured so that they cannot be tipped or dragged into a lower compartment. If such placement or securement is not possible, strongbacks shall be removed to another deck.
- (e) Any hatch beam or pontoon left in place next to an open hatch section being worked shall be locked or otherwise secured, so that it cannot be accidentally displaced. All portable, manually handled hatch covers, including those bound together to make a larger

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cover, shall be removed from any working section, and adjacent sections, unless securely lashed.

- (f)(1) The roller hatch beam at the edge of the open section of the hatch shall be lashed or pinned back so that it cannot be moved toward the open section.
- (2) Rolling, sectional or telescopic hatch covers of barges that open in a fore and aft direction shall be secured against unintentional movement while in the open position.
- (g) Hinged or folding hatch covers normally stowed in an approximately vertical position shall be positively secured when in the upright position, unless the design of the system otherwise prevents unintentional movement.
- (h) Hatches shall not be opened or closed while employees are in the square of the hatch below.
- (i) All materials such as dunnage, lashings, twist locks, or stacking cones shall be removed from the hatch cover or be secured to prevent them from falling off the cover before the hatch cover is moved.
- (j) When a hatch is to be covered, hatch covers or night tents shall be used. Any covering that only partially covers the hatch, such as alternate hatch covers or strips of dunnage, shall not be covered by a tarpaulin. Exception: A tarpaulin may be used to cover an open or partially open hatch to reduce dust emissions during bulk cargo loading operations, if positive means are taken to prevent employees from walking on the tarpaulin.

## Subpart F—Vessel's Cargo Handling Gear

#### §1918.51 General requirements (See also §1918.11 and appendix III of this part).

- (a) The safe working load specified in the cargo gear certification papers or marked on the booms shall not be exceeded. Any limitations imposed by the certificating authority shall be followed.
- (b) All components of cargo handling gear, including tent gantlines and associated rigging, shall be inspected by the employer or a designated person before each use and at appropriate intervals during use. Any gear that is

found unsafe shall not be used until it is made safe.

- (c) The employer shall determine the load ratings shown on the vessel's wire rope certificates for all wire rope and wire rope slings comprising part of ship's gear and shall observe these load ratings.
- (d) The following limitations shall apply to the use of wire rope as a part of the ship's cargo handling gear:
- (1) Eye splices in wire ropes shall have at least three tucks with a whole strand of the rope and two tucks with one-half of the wire cut from each strand. Other forms of splices or connections that the employer demonstrates will provide the same level of safety may be used;
- (2) Except for eye splices in the ends of wires, each wire rope used in hoisting or lowering, in guying derricks, or as a topping lift, preventer, segment of a multi-part preventer, or pendant, shall consist of one continuous piece without knot or splice; and
- (3) Wire rope or wire rope slings exhibiting any of the defects or conditions specified in §1918.62(b)(4) (i) through (vi) shall not be used.
- (e) Natural and synthetic fiber rope slings exhibiting any of the defects or conditions specified in §1918.62(e) (1) through (7) shall not be used.
- (f) Synthetic web slings exhibiting any of the defects or conditions specified in §1918.62(g)(2) (i) through (v) shall not be used.
- (g) Chains, including slings, exhibiting any of the defects or conditions specified in §1918.62 (h)(3) (iii), (iv), or (h)(6) shall not be used.

### §1918.52 Specific requirements.

- (a) Preventers. (1) When preventers are used they shall be of sufficient strength for the intended purpose. They shall be secured to the head of the boom independent of working guys unless, for cast fittings, the strength of the fitting exceeds the total strength of all lines secured to it. Any tails, fittings, or other means of making the preventers fast on the deck shall provide strength equal to that of the preventer itself.
- (2) Wire rope clips or knots shall not be used to form eyes in, nor to join sections of, preventer guys.